

TABLE L3 F&PRS REQUIREMENTS DELETIONS

req_source_id	req_key	text	clarify
ESN-0005	-1184	———— The ESN internal networks shall be dedicated networks linking ECS facilities for internal ECS operations (e.g., scheduling, product generation, QA validation).	
ESN-0007	-1465	———— The ESN shall restrict the use of ECS inter-DAAC wide area networks for data transmission between ECS DAACs and other facilities that are directly attached to the ECS external network.	
ESN-0180	-1190	———— The ESN shall connect with the International partners designated pickup points	
ESN-0210	-1507	———— The ESN management function shall have a capability to obtain status on specific data flows, such as expedited data products, to assure the successful operation of ESN.	
ESN-0250	-1193	———— The ESN shall provide a help service to assist users with communication questions and problems.	
ESN-0775	-1216	———— The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.	

END TABLE L3 F&PRS REQUIREMENTS DELETIONS

TABLE RBR REQUIREMENTS DELETIONS

paragraph_id	req_key	text	req_interpretation	clarify
ESN-0005#A	-5193	The ESN internal networks shall be dedicated networks linking ECS facilities for internal ECS operations (e.g., scheduling, product generation, QA validation).		
ESN-0005#B	-3952	The ESN internal networks shall be dedicated networks linking ECS facilities for internal ECS operations (e.g., scheduling, product generation, QA validation).		
ESN-0007#A	-5195	The ESN shall restrict the use of ECS inter-DAAC wide area networks for data transmission between ECS DAACs and other facilities that are directly attached to the ECS external network.		
ESN-0007#B	-3954	The ESN shall restrict the use of ECS inter-DAAC wide area networks for data transmission between ECS DAACs and other facilities that are directly attached to the ECS external network.		

TABLE RBR REQUIREMENTS DELETIONS (CONTINUED)

paragraph_id	req_key	text	req_interpretation	clarify
ESN-0180#A	5287	The ESN shall connect with the International partners designated pickup points.		
ESN-0180#B	3958	The ESN shall connect with the International partners designated pickup points.		
ESN-0210#A	6128	The ESN management function shall have a capability to obtain status on specific data flows such as expedited data products, to assure the successful operation of ESN.		
ESN-0210#B	6129	The ESN management function shall have a capability to obtain status on specific data flows such as expedited data products to assure the successful operation of ESN.		

TABLE RBR REQUIREMENTS DELETIONS (CONTINUED)

paragraph_id	req_key	text	req_interpretation	clarify
ESN-0250#A	-5296	The ESN shall provide a help service to assist users with communication questions and problems.		
ESN-0250#B	-3961	The ESN shall provide a help service to assist users with communication questions and problems.		
ESN-0775#Ir1	-1282	The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.	IR1: Total applicability	
ESN-0775#B	-3983	The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.		
ESN-0775#A	-5367	The ESN management service shall have the capability to redirect its reports to different devices such as console, disk or printer.		

END TABLE RBR REQUIREMENTS DELETIONS

Note: No IRD deletions

TABLE - L3 REQUIREMENT ALLOCATION IMPACTS

L3	key	text	clarify	query	req_title
EOSD0010	1	ECS shall use and support the Space Network (SN), via the EDOS/ Ecom <u>EBnet</u> interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.			Use and support Space Network (SN)
EOSD0015	1258	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/ Ecom <u>Naseom</u> <u>EBnet</u> interface, as backup of the SN, to obtain forward and return link data communications.			Use/support Deep Space Nwk (DSN)
EOSD0020	3	ECS shall use and support the EDOS/ Ecom <u>EBnet</u> interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality.			Use/Support EDOS/ Ecom <u>EBnet</u> I/F
EOSD0025	4	ECS shall use Ecom <u>EBnet</u> for flight operations data transfers.			Use for Flt Ops data Xfer

TABLE - L3 REQUIREMENT ALLOCATION IMPACTS (Continued)

L3	key	text	clarify	query	req_title
EOSD1502	1506	<p>ECS elements shall use Ecom <u>EBnet</u> for data communications for the following types of data:</p> <ul style="list-style-type: none"> a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF h. <u>Production Data Transfers between DAACs</u> i. <u>Management Data exchange with SMC</u> j. <u>Data Products Exchange with ADCs, IPs, and Others</u> 	<p>Current understanding has the <u>ORNL ESN support ESnet (Energy Science Network) for connectivity of ORNL DAAC to ECS and users via the Internet; and most of network traffic to/from ORNL as user traffic (not production).</u> <u>At GSFC the ESN intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges.</u> <u>The LaRC ESN includes support to use the Campus LAN for SAGE.</u> <u>Item j. "Others" includes TSDIS/GSEC data product exchanges.</u></p>	<p><u>The use of EBnet/NSI to replace Ecom instead of just EBnet needs resolving.</u></p>	<p>Use of Ecom <u>EBnet for Data Communications</u></p>

TABLE - L3 REQUIREMENT ALLOCATION IMPACTS (Continued)

req_source_id	req_key	text	clarify	query	req_title
EOSD4035	103	The ESN shall have no single point of failure for functions associated with <u>site-specific network databases and configuration data.</u>			ESN SPF &for Network Db & CM Data
ESN-0070	1188	The ESN shall support the <u>intrasite</u> elements data flow requirements identified in this specification.	<u>Requirement value includes ESN supporting non-DAAC component services or capabilities, e.g., LaRC use of Campus LAN for SAGE; GSFC SMC and EOC/ICC (FOS) connectivities.</u>		Support <u>intrasite</u> elem data flow requirements
ESN-0080	1466	The ESN shall <u>interface with EBnet for inter-site data transmission between ECS DAACs.</u> provide internal communications interfaces to GFE circuits provided by PSCN which link to: a. Specified ADCs b. Selected SCFs c. Selected EPDSs (Landsat 7, TRMM) d. Selected ISTs	Deleted 604 L2 trace. DV <u>At GSFC the ESN intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges.</u>		<u>I/F to ADCs, SCFs, EPDs, ISTs EBnet inter-site data trans for ECS DAACs</u>

TABLE - L3 REQUIREMENT ALLOCATION IMPACTS (Continued)

req_source_id	req_key	text	clarify	query	req_title
ESN-0800	1470	The ESN shall be capable of displaying the local network configuration status related to each system locally, and for all systems at the ESN network management facility <u>SMC</u>			Local net config status display
ESN-0830	1222	The ESN shall have the capability to detect and report communications related errors and events both locally and at the ESN network management facility <u>SMC</u> .			Subsys error detection & reporting
ESN-0910	1225	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the <u>SMC</u> ESN network management facility : a. set, view, and change alert threshold values b. enable and disable alert notifications (alarms) within a system c. enable and disable event reports within a system			Network fault mgt functions
SMC-3380	1083	d. manage error and event logging files The SMC shall evaluate the overall system performance <u>including the analysis of EBnet related fault and performance information and their long term trend analysis to determine the impact to ECS system.</u>			Evaluate system performance overall <u>sys. perf. incl. EBnet fault/perf. & trend anal.</u>

END TABLE - L3 REQUIREMENT ALLOCATION IMPACTS

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes)

FOR L3 EOSD0010, EOSD0015, EOSD0020, EOSD0025, and/or EOSD1502.

req_source_id	key	text	clarify	query	dest_interface	source_interface
AM1-0020	212	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106).			AM-1	ECS
AM1-0030	213	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive instrument commands in CCSDS CLTUs (as defined in AM-1 ICD 106).			AM-1	ECS
AM1-0050	214	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			ECS	AM-1

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes) CONTINUED
FOR L3 EOSD0010, EOSD0015, EOSD0020, and/or EOSD0025.

req_source_id	key	text	clarify	query	dest_interface	source_interface
AM1-0070	215	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			ECS	AM-1
AM1-0090	216	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			ECS	AM-1

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes) CONTINUED
FOR L3 EOSD0010, EOSD0025, and/or EOSD1502.

req_source_id	key	text	clarify	query	dest_interface	source_interface
NI-0010	123	ECS shall have the capability to communicate with the TDRSS via the EDOS/ EcomEBnet interface.			TDRSS/ECS	ECS/TDRSS
NI-0020	124	ECS shall have the capability to communicate with the TDRSS for transmitting commands to EOS spacecraft (via the EDOS/ EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			TDRSS	ECS
NI-0030	765	ECS shall have the capability to interface with the TDRSS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/ EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			ECS	TDRSS

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes) CONTINUED

FOR L3 EOSD0015, EOSD0025, and/or EOSD1502.

req_source_id	key	text	clarify	query	dest_interface	source_interface
NI-0220	134	ECS shall have the capability to communicate with the GN, DSN, and WOTS for transmitting commands to EOS spacecraft (via the EDOS/ EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			GN/DSN/WOTS	ECS
NI-0120	127	ECS shall have the capability to send TDRSS schedule requests to the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS.			NCC	ECS
NI-0310	138	ECS shall have the capability to communicate with the FDF via the EcomEBnet interface.			ECS/FDF	FDF/ECS
NI-0210	133	ECS shall have the capability to communicate with the GN, DSN, and WOTS via the EDOS/ EcomEBnet interface.			ECS/GN ECS/GN/DSN/WOTS	GN/ECS GN/DSN/WOTS/ECS

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes) CONTINUED
FOR L3 EOSD1502

req_source_id	key	text	clarify	query	dest_interface	source_interface
NI-0230	1032	ECS shall have the capability to interface with the GN, DSN, and WOTS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/ Ecom <u>EBnet</u> interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			ECS	GN/DSN/WOTS

TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes) CONTINUED

FOR L3 ESN-0080

req_source_id	key	text	clarify	query	dest_interface	source_interface
NI-0460	330	ECS shall have the capability to receive periodic information regarding NOLAN_ <u>EBnet</u> network performance and link utilization			ECS	NOLAN <u>EBnet</u>
NI-0400	146	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via NOLAN <u>EBnet</u> to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data			NOLAN/ECS	ECS/NOLAN <u>NASA Data Processing Facilities</u>
TRMM3120	802	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS .			TRMM	ECS

**NOTE: The following L3 F&PRS requirements did not have any IRD requirement links:
EOSD4035, ESN-0070, ESN-0800, ESN-0830, ESN-0910**

END TABLE - IRD Class Requirement Allocation Impacts (based on L3 Requirement Text Changes)

TABLE - RBR Requirement Allocation Impacts (based on L3 changes)

paragraph_id	req_key	text	req_interpretation	clarify	query
EOSD0010#A	4712	ECS shall use and support the Space Network (SN), via the EDOS/EcomEBnet interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	A: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS		
EOSD0010#B	3825	ECS shall use and support the Space Network (SN), via the EDOS/EcomEBnet interface, to obtain the forward and return link data communications needed to achieve full end-to-end ECS functionality.	B: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS		

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
EOSD0010#A	A	mission essential	Use and support Space Network (SN)	operational	FOS CSMS	test	un-verified	test	<u>un-verified</u>
EOSD0010#B	B	mission essential	Use and support Space Network (SN)	operational	FOS CSMS	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
EOSD0015#A	4719	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/Ecom/Nascom/EBnet interface, as backup of the SN, to obtain forward and return link data communications.	ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS		
EOSD0015#B	3826	ECS shall use and support the Deep Space Network (DSN), the Ground Network (GN), and the Wallops Orbital Tracking Station (WOTS), via the EDOS/Ecom/Nascom/EBnet interface, as backup of the SN, to obtain forward and return link data communications.	A&B: ONLY THE GSFC AND LARC DAACS WILL INTERFACE WITH EDOS		

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
EOSD0015#A	A	mission critical	Use/support Deep Space Nwk (DSN)	operational	FOS CSMS	test	un-verified	test	<u>un-verified</u>
EOSD0015#B	B	mission critical	Use/support Deep Space Nwk (DSN)	operational	FOS CSMS	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
EOSD0020#A	4724	ECS shall use and support the EDOS/ Ecom EBnet interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality			
EOSD0020#B	3827	ECS shall use and support the EDOS/ Ecom EBnet interface to obtain the data capture, data archival, and data distribution services needed to achieve full end-to-end ECS functionality			
EOSD0025#A	4730	ECS shall use Ecom EBnet for flight operations data transfers.			
EOSD0025#B	3828	ECS shall use Ecom EBnet for flight operations data transfers.			

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
EOSD0020#A	A	mission critical	Use/Support EDOS/ Ecom EBnet I/F	operational	FOS SDPS <u>CSMS</u>	test	un-verified	test	<u>un-verified</u>
EOSD0020#B	B	mission critical	Use/Support EDOS/ Ecom EBnet I/F	operational	FOS SDPS <u>CSMS</u>	test	un-verified	test	<u>un-verified</u>
EOSD0025#A	A	mission essential critical	Use for Flt Ops data Xfer	operational	FOS <u>CSMS</u>	test	un-verified	test	<u>un-verified</u>
EOSD0025#B	B	mission essential critical	Use for Flt Ops data Xfer	operational	FOS <u>CSMS</u>	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	key	text	req_interpretation	clarify	query
EOSD1502#A	6130	ECS elements shall use Ecom <u>EBnet</u> for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF <u>h. Production Data Transfers between DAACs</u> <u>i. Management Data exchange with SMC</u> <u>j. Data Products Exchange with ADCs, Ips, and Others</u>	A: to support AM-1 testing. A: Note that data exchange with FDF is SOW requirements!! A: CONCERN HERE IS EXPECTED READINESS OF FDF FOR RELEASE A I/F TESTING. NOTE THAT FOR RELEASE A N/A IF FDF IS NOT READY, BUT EOC FUNCTIONALITY SHOULD BE THERE TO ACCOMODATE IT!	<u>Current understanding has the ORNL ESN support ESnet (Energy Science Network) for connectivity of ORNL DAAC to ECS and users via the Internet; and most of network traffic to/from ORNL as user traffic (not production).</u> <u>At GSFC the ESN intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges.</u> <u>The LaRC ESN includes support to use the Campus LAN for SAGE.</u> <u>Item j. "Others" includes TSDIS/GSFC data product exchanges.</u>	<u>The use of EBnet/NSI to replace Ecom instead of just EBnet needs resolving.</u>

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
EOSD1502#A	A	mission critical	Use of Ecom <u>EBnet</u> for Data Commun	interface	FOS SDPS CSMS	demo	un-verified	demo	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	key	text	req_interpretation	clarify	query
EOSD1502#B	6131	ECS elements shall use Ecom <u>EBnet</u> for data communications for the following types of data: a. Production data sets (Level 0 data) b. Expedited data sets c. Real-time data (for health and safety) d. Command data e. Data requested from back-up archive f. TDRSS schedule requests g. Data exchange with the FDF <u>h. Production Data Transfers between DAACs</u> <u>i. Management Data exchange with SMC</u> <u>j. Data Products Exchange with ADCs, Ips, and Others</u>	B: To support AM-1 operations. Ecom <u>EBnet</u> COMMUNICATIONS BETWEEN THE GSFC DAAC AND FDF	<u>Current understanding has the ORNL ESN support ESnet (Energy Science Network) for connectivity of ORNL DAAC to ECS and users via the Internet; and most of network traffic to/from ORNL as user traffic (not production). At GSFC the ESN intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges. The LaRC ESN includes support to use the Campus LAN for SAGE. Item j. "Others" includes TSDIS/GSFC data product exchanges.</u>	<u>The use of EBnet/NSI to replace Ecom instead of just EBnet needs resolving.</u>

paragraph_id	release	req_cate gory	req_title	req_type	segment_allo cation	s_ver_ meth	s_ver_stat	a_ver_ meth	a_ver_stat
EOSD1502#B	B	mission critical	Use of Ecom <u>EBnet</u> for Data Commun	interface	FOS SDPS CSMS	demo	un-verified	demo	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
EOSD4035#A	5152	The ESN shall have no single point of failure for functions associated with <u>site-specific network databases and configuration data</u>	A: applicable DAACs		
EOSD4035#B	3928	The ESN shall have no single point of failure for functions associated with <u>site-specific network databases and configuration data</u>	B: all DAACs and EOC		

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
EOSD4035#A	A	mission critical	ESN SPF &Network Db & CM Data	RMA	CSMS	test	un-verified	test	<u>un-verified</u>
EOSD4035#B	B	mission critical	ESN SPF &Network Db & CM Data	RMA	CSMS	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
ESN-0070#A	5274	The ESN shall support the <u>intrasite</u> elements data flow requirements identified in this specification			
ESN-0070#B	3956	The ESN shall support the <u>intrasite</u> elements data flow requirements identified in this specification			
ESN-0070#Ir1	1218	The ESN shall support the <u>intrasite</u> elements data flow requirements identified in this specification			

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
ESN-0070#A	A	mission critical	Support elem data flow requirements	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0070#B	B	mission critical	Support elem data flow requirements	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0070#Ir1	Ir1	mission essential	Support elem data flow requirements	functional	CSMS	test	un-verified	<u>N/A Ir1</u>	<u>N/A Ir1</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
ESN-0080#A	5285	The ESN shall <u>interface with EBnet for inter-site data transmission between ECS DAACs</u> . provide internal communications interfaces to GFE circuits provided by PSCN which link to: a. Specified ADCs b. Selected SCFs c. Selected EPDSs (Landsat-7, TRMM) d. Selected ISTs	TRMM, AM-1	Deleted 604 L2 trace. DV At GSFC the ESN <u>intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges.</u>	
ESN-0080#B	3957	The ESN shall <u>interface with EBnet for inter-site data transmission between ECS DAACs</u> . provide internal communications interfaces to GFE circuits provided by PSCN which link to: a. Specified ADCs b. Selected SCFs c. Selected EPDSs (Landsat-7, TRMM) d. Selected ISTs	TRMM, AM-1	Deleted 604 L2 trace. DV At GSFC the ESN <u>intrasite communications include the SMC and EOC/ICC (FOS) for management data exchanges.</u>	

paragraph_id	release	req_cate gory	req_title	req_type	segment_allo cation	s_ver_ meth	s_ver_stat	a_ver_ meth	a_ver_stat
ESN-0080#A	A	mission essential	I/F to ADCs, SCFs, EPDs, ISTs <u>EBnet inter-site data trans. for ECS DAACs</u>	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0080#B	B	mission essential	I/F to ADCs, SCFs, EPDs, ISTs <u>EBnet inter-site data trans. For ECS DAACs</u>	functional	CSMS	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
ESN-0800#A	5197	The ESN shall be capable of displaying the local network configuration status related to each system locally, and for all systems at the ESN network management facility SMC .	All applicable sites		
ESN-0800#B	3986	The ESN shall be capable of displaying the local network configuration status related to each system locally, and for all systems at the ESN network management facility SMC .	All applicable sites		
ESN-0800#Ir1	1292	The ESN shall be capable of displaying the local network configuration status related to each system locally, and for all systems at the ESN network management facility SMC .	IR1: Network Mgmt Facility @ EDF		

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
ESN-0800#A	A	mission essential	Local net config status display	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0800#B	B	mission essential	Local net config status display	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0800#Ir1	Ir1	mission essential	Local net config status display	functional	CSMS	test	un-verified	<u>N/A Ir1</u>	<u>N/A Ir1</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
ESN-0830#A	5203	The ESN shall have the capability to detect and report communications related errors and events both locally and at the ESN network management facility SMC.			
ESN-0830#B	3989	The ESN shall have the capability to detect and report communications related errors and events both locally and at the ESN network management facility SMC.			
ESN-0830#Ir1	1299	The ESN shall have the capability to detect and report communications related errors and events both locally and at the ESN network management facility SMC.			

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
ESN-0830#A	A	mission critical	Subsys error detection & reporting	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0830#B	B	mission critical	Subsys error detection & reporting	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0830#Ir1	Ir1	mission essential	Subsys error detection & reporting	functional	CSMS	test	un-verified	<u>N/A Ir1</u>	<u>N/A Ir1</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
ESN-0910#A	5212	The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the <u>SMCESN network management facility</u> : a. Set, view, and change alert threshold values b. Enable and disable alert notifications (alarms) within a system c. Enable and disable event reports within a system			
ESN-0910#B	3992	d. Manage error and event logging files The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the <u>SMCESN network management facility</u> : a. Set, view, and change alert threshold values b. Enable and disable alert notifications (alarms) within a system c. Enable and disable event reports within a system d. Manage error and event logging files			

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
ESN-0910#A	A	mission essential	Network fault mgt functions	functional	CSMS	test	un-verified	test	<u>un-verified</u>
ESN-0910#B	B	mission essential	Network fault mgt functions	functional	CSMS	test	un-verified	test	<u>un-verified</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
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ESN-0910#Ir1	1308	<p>The ESN fault management shall provide the capability to perform the following functions, at a minimum, both locally and at the <u>SMCESN network management facility</u>:</p> <p>c. Enable and disable event reports within a system</p> <p>d. Manage error and event logging files</p>			
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paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
ESN-0910#Ir1	Ir1	mission essential	Network fault mgt functions	functional	CSMS	test	un-verified	<u>N/A Ir1</u>	<u>N/A Ir1</u>

TABLE - RBR Requirement Allocation Impacts (based on L3 changes) CONTINUED

paragraph_id	req_key	text	req_interpretation	clarify	query
SMC-3380#A	4306	The SMC shall evaluate <u>the overall system performance including the analysis of EBnet related fault and performance information and their long term trend analysis to determine the impact to ECS system.</u>			
SMC-3380#B	4941	The SMC shall evaluate <u>the overall system performance including the analysis of EBnet related fault and performance information and their long term trend analysis to determine the impact to ECS system.</u>	B: Full capability		
SMC-3380#Ir1	2670	The SMC shall evaluate <u>the overall system performance including the analysis of EBnet related fault and performance information and their long term trend analysis to determine the impact to ECS system.</u>	Ops.		

paragraph_id	release	req_category	req_title	req_type	segment_allocation	s_ver_meth	s_ver_stat	a_ver_meth	a_ver_stat
SMC-3380#A	A	mission essential	Evaluate system performance <u>overall sys. perf. incl. EBnet fault/perf. & trend anal.</u>	functional	CSMS	analysis	un-verified	analysis	<u>un-verified</u>
SMC-3380#B	B	mission essential	Evaluate system performance <u>overall sys. perf. incl. EBnet fault/perf. & trend anal.</u>	functional	CSMS	analysis	un-verified	analysis	<u>un-verified</u>
SMC-3380#Ir1	Ir1	mission essential	Evaluate system performance <u>overall sys. perf. incl. EBnet fault/perf. & trend anal.</u>	functional	CSMS	analysis	un-verified	<u>N/A Ir1</u>	<u>N/A Ir1</u>

END TABLE - RBR Requirement Allocation Impacts (based on L3 changes)

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes)
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0010	NI-0010#A	3367	ECS shall have the capability to communicate with the TDRSS via the EDOS/ EcomEB net interface.			
	NI-0010#B	3368	ECS shall have the capability to communicate with the TDRSS via the EDOS/ EcomEB net interface.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0010	NI-0010#A	A	TBD <u>mission essential</u>	Communications with TDRSS	TBD <u>interface</u>	FOS SDPS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0010#B	B	TBD <u>mission critical</u>	Communications with TDRSS	TBD <u>interface</u>	FOS SDPS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0020	NI-0020#B	3370	ECS shall have the capability to communicate with the TDRSS for transmitting commands to EOS spacecraft (via the EDOS/EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			
	NI-0020#A	3369	ECS shall have the capability to communicate with the TDRSS for transmitting commands to EOS spacecraft (via the EDOS/EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			

IRD	RBR	rel	req_ cat	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0020	NI-0020#B	B	TBD <u>mission critical</u>	Commanding via TDRSS	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	NI-0020#A	A	TBD <u>mission essential</u>	Commanding via TDRSS	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
AM1-0020	AM1-0020#B	5602	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106)			
	AM1-0020#A	5601	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive spacecraft commands in CCSDS CLTUs (as defined in AM-1 ICD 106)			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
AM1-0020	AM1-0020#B	B	<u>mission critical</u>	AM-1 Spacecraft Commands	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	AM1-0020#A	A	<u>mission essential</u>	AM-1 Spacecraft Commands	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
AM1-0030	AM1-0030#A	5603	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive instrument commands in CCSDS CLTUs (as defined in AM-1 ICD 106)			
	AM1-0030#B	5604	The EOC shall have the capability to send (via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS) and the AM-1 spacecraft shall have the capability to receive instrument commands in CCSDS CLTUs (as defined in AM-1 ICD 106)			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
AM1-0030	AM1-0030#A	A	TBD <u>mission essential</u>	AM-1 Instrument Commands	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	AM1-0030#B	B	TBD <u>mission critical</u>	AM-1 Instrument Commands	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
AM1-0050	AM1-0050#A	5605	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			
	AM1-0050#B	5606	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) real time AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
AM1-0050	AM1-0050#A	A	TBD <u>mission</u> <u>essential</u>	AM-1 Real Time H/K Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	AM1-0050#B	B	TBD <u>mission</u> <u>critical</u>	AM-1 Real Time H/K Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
AM1-0070	AM1-0070#B	5608	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			
	AM1-0070#A	5607	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets) recorded AM-1 spacecraft and instrument housekeeping telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
AM1-0070	AM1-0070#B	B	TBD <u>mission critical</u>	AM-1 Recorded H/K Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	AM1-0070#A	A	TBD <u>mission essential</u>	AM-1 Recorded H/K Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
AM1-0090	AM1-0090#A	5609	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			
	AM1-0090#B	5610	The AM-1 spacecraft shall have the capability to send (in CADU format) and the EOC shall have the capability to receive (in EDUs containing CCSDS telemetry packets and CLCWs) AM-1 SCC, CTIU, and instrument microprocessor memory dump telemetry packets (as defined in AM-1 ICD 106) via EDOS/EcomEBnet and the SN, GN, DSN, or WOTS interfaces.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
AM1-0090	AM1-0090#A	A	TBD <u>mission essential</u>	AM-1 Dump Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	AM1-0090#B	B	TBD <u>mission critical</u>	AM-1 Dump Telemetry	interface	FOS CSMS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0030	NI-0030#A	3371	ECS shall have the capability to interface with the TDRSS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission Detailed Mission Requirements documents.			
	NI-0030#B	3372	ECS shall have the capability to interface with the TDRSS for obtaining return link (telemetry) data from EOS spacecraft (via the EDOS/EcomEBnet interface). Mission-specific requirements for supporting EOS spacecraft telemetry operations will be documented in the EOS mission Detailed Mission Requirements documents.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0030	NI-0030#A	A	TBD <u>mission essential</u>	Telemetry via TDRSS	interface	FOS SDPS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified
	NI-0030#B	B	TBD <u>mission critical</u>	Telemetry via TDRSS	interface	FOS SDPS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-A.1.1	EDOS-A.1.1#A	5760	The DIF shall provide the capability to transfer return link real-time Path Service EDOS Data Units (EDUs) to the EOC. [EDOS generates EDUs by concatenating an EDOS service header (ESH) with each applicable return link path service data unit (SDU)]			
	EDOS-A.1.1#B	5761	The DIF shall provide the capability to transfer return link real-time Path Service EDOS Data Units (EDUs) to the EOC.[EDOS generates EDUs by concatenating an EDOS service header (ESH) with each applicable return link path service data unit (SDU)]			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-A.1.1	EDOS-A.1.1#A	A	TBD <u>mission</u> <u>essential</u>	Real Time EDUs to EOC	interface	FOS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified
	EDOS-A.1.1#B	B	TBD <u>mission</u> <u>critical</u>	Real Time EDUs to EOC	interface	FOS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-A.1.2	EDOS-A.1.2#B	5763	The DIF shall provide the capability to transfer Command Link Control Word EDUs to the EOC.			
	EDOS-A.1.2#A	5762	The DIF shall provide the capability to transfer Command Link Control Word EDUs to the EOC.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-A.1.2	EDOS-A.1.2#B	B	TBD <u>mission critical</u>	CLCW EDUs to EOC	interface	FOS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	EDOS-A.1.2#A	A	TBD <u>mission essential</u>	CLCW EDUs to EOC	interface	FOS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-A.1.3	EDOS-A.1.3#B	5765	The DIF shall provide the capability to receive forward link real-time CLTUs from the EOC.			
	EDOS-A.1.3#A	5764	The DIF shall provide the capability to receive forward link real-time CLTUs from the EOC.			
EDOS-4.2.2	EDOS-4.2.2-#B	5814	The DPF shall interface with the LaRC DAAC to transfer PDSs, QDSs, Archive Data Sets (ADSs), and Mission Test Data Sets.			
	EDOS-4.2.2-#A	5812	The DPF shall interface with the LaRC DAAC to transfer PDSs, QDSs, Archived Data Sets (ADSs), and Mission Test Data Sets.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-A.1.3	EDOS-A.1.3#B	B	TBD <u>mission critical</u>	Forward link CLTUs to EDOS	interface	FOS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	EDOS-A.1.3#A	A	TBD <u>mission essential</u>	Forward link CLTUs to EDOS	interface	FOS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
EDOS-4.2.2	EDOS-4.2.2-#B	B	TBD <u>mission essential</u>	DPF-LaRC DAAC Interfaces	interface	SDPS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	EDOS-4.2.2-#A	A	TBD <u>mission essential</u>	DPF-LaRC DAAC Interfaces	interface	SDPS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-B.4.2	EDOS-B.4.2#B	5818	The DPF shall provide the capability to transfer any PDS to the LaRC DAAC.			
	EDOS-B.4.2#A	5817	The DPF shall provide the capability to transfer any PDS to the LaRC DAAC.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-B.4.2	EDOS-B.4.2#B	B	TBD <u>mission</u> <u>essential</u>	PDSs to LaRC DAAC	interface	SDPS	<u>Test</u>	<u>unverified</u>	TBD	un-verified
	EDOS-B.4.2#A	A	TBD <u>mission</u> <u>essential</u>	PDSs to LaRC DAAC	interface	SDPS	<u>Test</u>	<u>unverified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-B.4.3	EDOS-B.4.3#B	5823	The DPF shall provide the capability to copy PDSs to removable physical media for backup to electronic delivery.			
EDOS-4.2.3	EDOS-4.2.3-#B	5829	The DPF shall interface with the GSFC DAAC to transfer PDSs, QDSs, ADSs, and Mission Test Data Sets.			
	EDOS-4.2.3-#A	5827	The DPF shall interface with the GSFC DAAC to transfer PDSs, QDSs, ADSs, and Mission Test Data Sets.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-B.4.3	EDOS-B.4.3#B	B	TBD <u>mission</u> <u>essential</u>	PDSs to LaRC DAAC (backup delivery)	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified
EDOS-4.2.3	EDOS-4.2.3-#B	B	TBD <u>mission</u> <u>essential</u>	DPF-GSFC DAAC Interfaces	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified
	EDOS-4.2.3-#A	A	TBD <u>mission</u> <u>essential</u>	DPF-GSFC DAAC Interfaces	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0010**

IRD	RBR	key	text	clarify	query	req_ interp
EDOS-C.4.2	EDOS-C.4.2#A	5833	The DPF shall provide the capability to transfer PDS to the GSFC DAAC.			
	EDOS-C.4.2#B	5832	The DPF shall provide the capability to transfer PDS to the GSFC DAAC.			
EDOS-C.4.3	EDOS-C.4.3#B	5834	The DPF shall provide the capability to copy PDSs to removable physical media for backup to electronic delivery.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
EDOS-C.4.2	EDOS-C.4.2#A	A	TBD <u>mission</u> <u>essential</u>	PDSs to GSFC DAAC	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified
	EDOS-C.4.2#B	B	TBD <u>mission</u> <u>essential</u>	PDSs to GSFC DAAC	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified
EDOS-C.4.3	EDOS-C.4.3#B	B	TBD <u>mission</u> <u>fullfillment</u>	PDSs to GSFC DAAC (backup delivery)	interface	SDPS	<u>Test</u>	<u>unverif</u> <u>ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0015**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0210	NI-0210#A	3375	ECS shall have the capability to communicate with the GN, DSN, and WOTS via the EDOS/ Ecom <u>EBnet</u> interface.			
	NI-0210#B	3376	ECS shall have the capability to communicate with the GN, DSN, and WOTS via the EDOS/ Ecom <u>EBnet</u> interface.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver _meth	a_ver_ status	s_ver _meth	s_ver_ status
NI-0210	NI-0210#A	A	TBD <u>mission essential</u>	Communications with <u>GN/DSN/WOTS</u>	interface	FOS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified
	NI-0210#B	B	TBD <u>mission critical</u>	Communications with <u>GN/DSN/WOTS</u>	interface	FOS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0015**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0220	NI-0220#A	3377	ECS shall have the capability to communicate with the GN, DSN, and WOTS for transmitting commands to EOS spacecraft (via the EDOS/ Ecom EBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			
	NI-0220#B	3378	ECS shall have the capability to communicate with the GN, DSN, and WOTS for transmitting commands to EOS spacecraft (via the EDOS/ Ecom EBnet interface). Mission-specific requirements for supporting EOS spacecraft command operations will be documented in the EOS mission-level Detailed Mission Requirements documents.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0220	NI-0220#A	A	TBD <u>mission essential</u>	Commanding via GN/DSN/WOTS	interface	FOS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified
	NI-0220#B	B	TBD <u>mission critical</u>	Commanding via GN/DSN/WOTS	interface	FOS CSMS	<u>Test</u>	<u>unverif ied</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0025**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0110	NI-0110#B	3374	ECS shall have the capability to communicate with the NCC via the Ecom -EBnet interface.			
	NI-0110#A	3373	ECS shall have the capability to communicate with the NCC via the Ecom -EBnet interface.			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0110	NI-0110#B	B	TBD <u>mission essential</u>	Communications with NCC	interface	FOS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0110#A	A	TBD <u>mission essential</u>	Communications with NCC	interface	FOS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD0025**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0310	NI-0310-b#B	3385	ECS shall have the capability to communicate with the FDF via the EcomEBnet interface (FOS, SDPS, CSMS)			
	NI-0310-a#B	3384	ECS shall have the capability to communicate with the FDF via the EcomEBnet interface (FOS and CSMS only).			
	NI-0310-a#A	3383	ECS shall have the capability to communicate with the FDF via the EcomEBnet interface (FOS and CSMS only).			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0310	NI-0310-b#B	B	TBD <u>mission essential</u>	FDF Communications Interface	interface	FOS SDPS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0310-a#B	B	TBD <u>mission essential</u>	FDF Communications Interface	interface	FOS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0310-a#A	A	TBD <u>mission essential</u>	FDF Communications Interface	interface	FOS CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD1502**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0120	NI-0120#A	2045	ECS shall have the capability to send TDRSS schedule requests to the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS .			
	NI-0120#B	2046	ECS shall have the capability to send TDRSS schedule requests to the NCC. These messages will be defined in the ICD Between the GSFC MOCs and the NCCDS .			

IRD	RBR	rel	req_ category	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0120	NI-0120#A	A	TBD <u>mission essential</u>	TDRSS Schedule Requests to NCC	interface	FOS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0120#B	B	TBD <u>mission essential</u>	TDRSS Schedule Requests to NCC	interface	FOS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 ESN-0080**

IRD	RBR	req_ key	text	clarify	query	req_ interp
NI-0400	NI-0400#Ir1	2078	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via NOLAN <u>EBnet</u> to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data			
	NI-0400#A	2079	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via NOLAN <u>EBnet</u> to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data			
	NI-0400#B	2080	ECS shall have the capability to interface with NASA Data Processing Facilities (including the GSFC SDPF) via NOLAN <u>EBnet</u> to receive the following data (at a minimum): a. Science data b. Ancillary data c. Orbit data			

IRD	RBR	rel	req_ cat	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0400	NI-0400#Ir1	Ir1	TBD <u>mission essential</u>	NOLAN <u>NDPF</u> Interface	interface	CSMS	<u>N/A Ir1</u>	<u>N/A Ir1</u>	TBD	un-verified
	NI-0400#A	A	TBD <u>mission essential</u>	NOLAN <u>NDPF</u> Interface	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0400#B	B	TBD <u>mission essential</u>	NOLAN <u>NDPF</u> Interface	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 ESN-0080**

IRD	RBR	key	text	clarify	query	req_ interp
TRMM3120	TRMM3120#Ir1	6015	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.			
	TRMM3120#B	6014	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.			
	TRMM3120#A	6013	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.			

IRD	RBR	rel	req_ cat	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
TRMM3120	TRMM3120#Ir1	Ir1	TBD <u>mission fullfillment</u>	ESDIS communications for TSDIS/MSFC	interface	CSMS	<u>N/A Ir1</u>	<u>N/A Ir1</u>	TBD	un-verified
	TRMM3120#B	B	TBD <u>mission fullfillment</u>	ESDIS communications for TSDIS/MSFC	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	TRMM3120#A	A	TBD <u>mission fullfillment</u>	ESDIS communications for TSDIS/MSFC	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 SMC-3380**

IRD	RBR	key	text	clarify	query	req_ interp
NI-0460	NI-0460#A	2087	ECS shall have the capability to receive periodic information regarding NOLAN <u>EBnet</u> network performance and link utilization.			
	NI-0460#B	2088	ECS shall have the capability to receive periodic information regarding NOLAN <u>EBnet</u> network performance and link utilization.			

IRD	RBR	rel	req_ cat	req_title	req_type	segment_ allocation	a_ver_ meth	a_ver_ status	s_ver_ meth	s_ver_ status
NI-0460	NI-0460#A	A	TBD <u>mission fullfillment</u>	NOLAN <u>EBnet</u> Performance/Link Utilization	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NI-0460#B	B	TBD <u>mission fullfillment</u>	NOLAN <u>EBnet</u> Performance/Link Utilization	interface	CSMS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD1502 (IRD's added)**

IRD	RBR	key	text	clarify	inter.	query
ASTER-0940	ASTER-0940#B	5724	ECS shall have the capability to send and ASTER GDS shall have the capability to receive Level 0 - Level 4 data products, including associated ancillary, metadata, and browse.	<u>Release B does not handle Level 0 data</u>		
	ASTER-0945#B	5725	ASTER GDS shall have the capability to send and ECS shall have the capability to receive Level 1b - Level 4 ASTER data products, including associated ancillary, metadata, and browse.			
	NOAA0300#A	2126	The SAAs shall have the capability to send and the ECS shall have the capability to receive Browse Results.			
	NOAA0300#B	2127	The SAAs shall have the capability to send and the ECS shall have the capability to receive Browse Results.			

IRD	RBR	rel	req_cat	req_title	req_type	segment_allocation	a_ver_meth	a_ver_status	s_ver_meth	s_ver_status
ASTER-0940	ASTER-0940#B	B	<u>mission essential</u> TBD	ECS Data Products to Japan	interface	SDPS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	ASTER-0945#B	B	<u>mission essential</u> TBD	ASTER GDS Data Products to ECS	interface	SDPS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NOAA0300#A	A	<u>mission essential</u> TBD	SAA send browse results	interface	SDPS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified
	NOAA0300#B	B	<u>mission essential</u> TBD	SAA send browse results	interface	SDPS	<u>Test</u>	<u>un-verified</u>	TBD	un-verified

**TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED
FOR L3 EOSD1502 (IRD's added)**

IRD	RBR	key	text	clarify	inter.	query
TRMM4110	TRMM4110#A	6038	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS standard products, metadata, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.			
	TRMM4110#B	6039	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS standard products, metadata, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.			
	TRMM4110#Ir1	6040	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS standard products, metadata, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.			

IRD	RBR	rel	req_cat	req_title	req_type	segment_allocation	a_ver_meth	a_ver_status	s_ver_meth	s_ver_status
TRMM4110	TRMM4110#A	A	<u>mission essential</u> TBD	ESDIS communications for TSDIS/GSFC	interface	CSMS	<u>Analysis</u>	<u>un-verified</u>	TBD	un-verified
	TRMM4110#B	B	<u>mission essential</u> TBD	ESDIS communications for TSDIS/GSFC	interface	CSMS	<u>Analysis</u>	<u>un-verified</u>	TBD	un-verified
	TRMM4110#Ir1	B	<u>mission essential</u> TBD	ESDIS communications for TSDIS/GSFC	interface	CSMS	<u>N/A Ir1</u>	<u>N/A Ir1</u>	TBD	un-verified

TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes) CONTINUED

NOTE: The following L3 F&PRS requirements did not have any IRD requirement links: EOSD4035, ESN-0070, ESN-0800, ESN-0830, ESN-0910.

The following IRD requirements do not have any RbR requirements linked to them: EDOS-4.1.1, EDOS-4.1.2, EDOS-4.2.1, EDOS-A.4.1, EDOS-B.4.1, EDOS-C.4.1, EDOS-4.2.6, EDOS-G.4.1, EDOS-G.4.2, EDOS-A.1.1.3, NI-0230.

END TABLE - RbR/IRD Class Requirement Allocation Impacts (based on IRD/L3 changes)